# STATE ASSURANCE FUND 2005 COST CEILINGS

## SUPPLEMENTAL UNIT RATES

## PERSONNEL RATES

1. Principal level per hour

The authorized tasks for a principal level professional include: direct professional staff; serve as technical expert or coordinator of large or technically complex sites; provide final review of project documents that legally bind the company; limited site visits on complex projects. Assume no per diem allowance.

2. Senior level per hour

The authorized tasks for a senior level professional include: project management/oversight; limited work plan preparation on complex sites; final report preparation/review; develop and oversee project budget; work plan review; coordinate with agency, client and contractors; hydrogeologic and contaminant modeling; equipment specification review; occasional site visits during site characterization activities; conduct field activities during complex remediation activities; supervise complex remediation activities. Assume no per diem allowance.

3. Project level per hour

The authorized tasks for a project level professional include: work plan preparation; field work preparation and planning; occasional site visits during site characterization activities; conduct field activities during complex remediation activities; report preparation and review; data review and analysis; equipment selection and design; supervise UST soil and groundwater characterization and remediation activities; oversight of waste characterization, transportation, and disposal. Assume no per diem allowance.

4. Staff level per hour

The authorized tasks for a staff level professional include: report preparation; remediation system installation, operation, and maintenance; site reconnaissance and mapping; obtain site access; installation of soil borings, groundwater monitoring wells and remedial injection and extraction wells; supervise UST removal, groundwater sample collection, soil removal, and other on-site remediation activities; assist with waste characterization, transportation, and disposal; assist in modeling and data analysis. Assume no per diem allowance.

5. Field level per hour

The authorized tasks for a field level professional include: field activities associated with periodic groundwater monitoring and monthly static water level/free product gauging; well purging and development; free product removal; sample collection, limited contractor supervision; field equipment/sample preparation; decontamination; other routine field activities. Assume no per diem allowance.

## 6. Technical level

(Cadd, computer, map production, etc.)

per hour

The authorized tasks for technical personnel include: CAD work; generate new drawings, maps and plans; revisions to existing drawings, maps, and plans. Assume no per diem allowance.

#### 7. Administrative assistant

per hour

The authorized tasks for administrative assistant professionals include: bookkeeping; invoice preparation; proofreading/editing; and some word processing, etc. assume no per diem allowance.

## 8. Word processor

per hour

The authorized tasks for word processing professionals include: general clerical duties; word processing; documentation reproduction; report binding; filing; etc. assume no per diem allowance.

## CONSTRUCTION/CONTRACTING PERSONNEL RATES

# 9. Construction field supervisor

per hour

The authorized tasks for a construction field supervisor include: supervision of all logistical matters including preand post-field planning and scheduling activities; supervises complex construction projects requiring multiple construction personnel. Assume no per diem allowance.

10. Skilled laborer

per hour

The authorized tasks for skilled laborers include: small equipment operation, as well as tasks typically performed by individuals in the general construction, welding, electrical, and plumbing trades. A skilled laborer may hold a specific license or certification for a particular skill or craft. Assume no per diem allowance.

#### 11. Unskilled laborer

per hour

The authorized tasks for unskilled laborers include general manual labor task (for example, a driller's helper). Assume no per diem allowance.

12. Equipment operator (average rate to operate

A standard piece of equipment)

per hour

The authorized tasks for equipment operators include: operate heavy equipment including backhoes, dump trucks, excavators, loaders, and drill rigs (driller only), etc. assume no per diem allowance.

#### PER DIEM RATES

## 13. Per diem requirement

50 miles

NOTE: minimum mileage for per diem eligibility is not a Cost Ceiling. For numbering consistency only, the Cost Ceiling Item Number is retained. See General Notes item 7.

14. Fieldwork per diem without overnight stay

per day

Fieldwork per diem without overnight stay requires a minimum 8-hour field day and is applicable to both consultants and contractors.

15. Fieldwork per diem with overnight stay

per day

Fieldwork per diem with overnight stay (including lodging) is applicable to both consultants and contractors. An overnight stay is appropriate when time and/or distance prevents a return home at the end of a work day.

## CONSULTANT MILEAGE RATES

## 16. Consultant mileage rate (single person)

per mile

Company owned vehicle mileage rate is 2 / mile. Note: the dollar per mile ( $\frac{mile}{mile}$ ) mileage rate may not be marked up on a company-owned vehicle. A rental price and additional mileage charges for a company-owned vehicle may be reimbursed if the total cost of both is less than the established mileage cost ceiling will allow. Note:

consultant travel time is included in the \$/mile rate and is independent of personnel level of individual traveling to and from the site. Assume (1) individual at staff level rate.

## 17. Consultant mileage rate (two people)

per mile

Company owned vehicle mileage rate is \$4 / mile. Note: the dollar per mile (\$/mile) mileage rate may not be marked up on a company-owned vehicle. A rental price and additional mileage charges for a company-owned vehicle may be reimbursed if the total cost of both is less than the established mileage cost ceiling will allow. Note: consultant travel time is included in the \$/mile rate and is independent of personnel level of individuals traveling to and from the site. Assume (2) individuals, each at staff level rate.

#### PROJECT SET-UP AND ADMINISTRATION

## 18. Initial project set-up

lump sum

This task is for newly confirmed releases or for a new consultant on site and includes the initial scheduling, assessment of personnel requirements, incident information and agency requirements for the assessment and possible remediation of the site. This price does not include file copying costs. Price is per site. This task assumes a round trip travel distance of 60 miles. Incremental mileage over 60 miles will be evaluated on a per mile basis utilizing the appropriate consultant mileage rate set forth in Cost Ceiling Item Numbers 135 and 136.

## 19. Previously assessed project review

lump sum

This task is for an existing, confirmed release, and includes the review of assessment and corrective action files from the client and previous consultant (s). Financial information may also be obtained for future reimbursement applications. This price does not include file copying costs. Summary of the information reviewed must be documented within the lust file. Price is per site. This task assumes a round trip travel distance of 60 miles. Incremental mileage over 60 miles will be evaluated on a per mile basis utilizing the appropriate consultant mileage rate set forth in Cost Ceiling Item Numbers 16 and 17.

## 20. Agency data analysis

lump sum

This task is for an existing, confirmed and includes the review and analysis of agency files and data. Data may be maintained by fire departments or state / county environmental agencies. This price does not include file copying costs. Summary of the information reviewed must be documented within the lust file. Price is per site. This task assumes a round trip travel distance of 60 miles. Incremental mileage over 60 miles will be evaluated on a per mile basis utilizing the appropriate consultant mileage rate set forth in Cost Ceiling Item Numbers 16 and 17.

## 21 Site reconnaissance and field receptor survey (1/4 mile)

lump sum

This task consists of a site feature inspection of the immediate site and surrounding properties. The inspection will note tank location, dispenser location, monitoring wells, and other site features. Potential migration pathways such as utility lines, storm sanitary sewers, catch basins and drainage ditches are to be noted. The site reconnaissance should suffice for development of health and safety plans, and locating assessment and remediation activities. This task also includes the total personnel, equipment and material costs to conduct a physical search within a 0.25 mile radius of the site to locate private wells or other receptors and typically does not require a door-to-door search. Price is per site. The final product from this task is a field grade map and notes to support subsequent activities. The final work product summarizing these activities must be documented within the lust file to be considered for reimbursement of claimed expenses. This task assumes a round trip travel distance of 60 miles. Incremental mileage over 60 miles will be evaluated on a per mile basis utilizing the appropriate consultant mileage rate set forth in Cost Ceiling Item Numbers 16 and 17.

## 22. Agency receptor survey (1/4 mile)

lump sum

This task consists of the identification of public and private water supply wells within 0.25 miles of a site or within a defined area set by the regulatory agency. The information may be obtained using a local water resource agency and usually includes well ownership, well location, well completion data, well use, and depth to water. This cost includes time to summarize the data and the minimal agency fees charged to conduct survey. Price is per site. This task assumes a round trip travel distance of 60 miles. Incremental mileage over 60 miles will be evaluated on a per mile basis utilizing the appropriate consultant mileage rate set forth in Cost Ceiling Item Numbers 16 and 17.

#### 23. Historical research

lump sum

This task includes interviews, photo analysis, building permit review, and title review. The object of this task is to identify property use over the last 50 years. This task does not include direct cost for data acquisition (i.e., cost of title search or aerial photo[s]). price is per site. This task assumes a round trip travel distance of 60 miles.

Incremental mileage over 60 miles will be evaluated on a per mile basis utilizing the appropriate consultant mileage rate set forth in Cost Ceiling Item Numbers 16 and 17.

#### 24. Pursuit of off-site access agreement with a private entity only

per party solicitation

This task consists of the total personnel, equipment and material costs associated with pursuit of an off-site access agreement including review of tax assessor records. This task assumes that off-site access agreements are pursued in accordance with A.R.S. 49-1022. For purposes of this task, reimbursable site access efforts are limited to: (2) written requests for access by the owner/operator, documented receipt of each written request, and, if necessary, a written request by the owner/operator that the ADEQ attempt to obtain access to the property. This task does not include permit costs, or document copying fees. This task assumes a round trip travel distance of 60 miles. Incremental mileage over 60 miles will be evaluated on a per mile basis utilizing the appropriate consultant mileage rate set forth in Cost Ceiling Item Numbers 16 and 17.

## WORK PLAN PREPARATION

## 25. Approved site characterization work plan (Soil only)

per plan

This activity consists of the total personnel, equipment, and material costs (\$/approved work plan) required to complete the following activities: prepare site specific work plan as required and approved by ADEQ or for SAF pre-approval purposes. This report includes property background, UST history discussion, and discussion of proposed activities and preparation of cost estimates and budgets. Report costs include: senior level review of document, clerical support, and all other direct costs such as copying, binding, and postage. The \$/report cost includes modification, revisions, and re-submittals necessary to obtain agency approval. The \$/report cost does not include mileage, per diem, or other out-of-office expenses. Note: this item does not include SAF application preparation.

## 26. Approved site characterization work plan (Soil and groundwater)

per plan

This activity consists of the total personnel, equipment, and material costs (\$/approved work plan) required to complete the following activities: prepare site specific work plan as required by ADEQ or for SAF pre-approval purposes. This report includes property background, UST history discussion, and discussion of proposed activities and preparation of cost estimates and budgets. Report costs include: senior level review of document, clerical support, and all other direct costs such as copying, binding and postage. The \$/report cost includes modification, revisions, and re-submittals necessary to obtain agency approval. The \$/report cost does not include mileage, per diem, or other out-of-office expenses. Note: this item does not include SAF application preparation.

# 27. Initial site characterization health and safety plan

per plan

This activity consists of the total personnel, equipment, and material costs (\$/plan) required to complete the following activities: prepare a health and safety plan for all site characterization activities in accordance with OSHA requirements for all planned activities. This task includes time for review; clerical support; and all other direct costs such as copying and binding.

#### REMEDIAL PLANS

## 28. ADEQ-approved corrective action plan (CAP) for active

Remedial treatment of contaminate

per CAP

Note: Cost Ceiling Item Number 28 applies only to a CAP that is not subject to the UST Release Reporting and Corrective Action rules (A.A.C. R18-12-260 through R18-12-264.01 - effective August 22, 2002). For applicability of these rules, see A.A.C. R18-12-250. Reports submitted in accordance with the UST Release Reporting and Corrective Action rules must use the appropriate Cost Ceiling Item Numbers 200 through 210.

This activity consists of the total personnel, equipment, and material costs (\$/report) required to complete an approved cap proposing active treatment approach. The cap must be prepared in accordance with ADEQ corrective action guidance and must include a discussion of feasibility testing methodology and results.

## 29. ADEQ-approved corrective action plan (CAP)

For natural attenuation

per CAP

Note: Cost Ceiling Item Number 29 applies only to a CAP that is not subject to the UST Release Reporting and Corrective Action rules (A.A.C. R18-12-260 through R18-12-264.01 - effective August 22, 2002). For applicability of these rules, see A.A.C. R18-12-250. Reports submitted in accordance with the UST Release Reporting and Corrective Action rules must use the appropriate Cost Ceiling Item Numbers 200 through 210.

This activity consists of the total personnel, equipment, and material costs (\$/report) required to complete an approved cap proposing natural attenuation. The CAP must be prepared in accordance with ADEQ corrective action guidance and must include a discussion of feasibility testing methodology and results.

## 30. Pre-built remedial engineering design

per design

This task consists of the total personnel, equipment, and material costs (\$/design) necessary to complete pre-built remedial engineering design package. At a minimum, the design package should include all subgrade and surface component specifications, site plans and construction details. Note: this item only pertains to design packages prepared following cap approval to obtain construction estimates and permits.

## 31. Preparation of work plan to implement an ADEQ-approved

Corrective action plan

per plan

This activity consists of the total personnel, equipment, and material costs (\$/work plan) for preparation of a work plan to implement a phase(s) of an approved cap not to exceed three years in duration. The work plan should reference the approved cap and summarize proposed remedial activities. This task includes time for review, clerical support, and all other direct costs such as copying and binding.

## 32. Remediation health and safety plan

per plan

This activity consists of the total personnel, equipment, and material costs (\$/plan) required to complete the following activities: prepare a health and safety plan for remediation activities in accordance with OSHA requirements for all planned tasks. This task includes time for review; clerical support; and all other direct costs such as copying and binding.

#### FIELD ACTIVITIES

#### 33. Consultant's day rate

DO NOT USE

NOTE: No 2004 Cost Ceiling amount exists for Item Number 33. Do not use this Cost Ceiling Item Number. Consultant field work, if not included in another Cost Ceiling Item Number, is to be claimed using the appropriate personnel hourly rate. Equipment, if not included in a Cost Ceiling Item Number, is to be claimed using "time and materials" detail per A.A.C. §R18-12-605(E).

## 34. Consultant's half day rate

DO NOT USE

Note: No 2004 Cost Ceiling amount exists for Item Number 34. Do not use this Cost Ceiling Item Number. Consultant field work, if not included in another Cost Ceiling Item Number, is to be claimed using the appropriate personnel hourly rate. Equipment, if not included in a Cost Ceiling Item Number, is to be claimed using "time and materials" detail per A.A.C. §R18-12-605(E).

#### CONTRACTOR UST REMOVAL AND CLOSURE

#### 35. Contractor mob/demob

per event

This task consists of the total personnel, equipment and material costs (\$/event) for the following activities: preparation and loading of all appropriate equipment, materials, and supplies, including support vehicles. This task also includes all costs associated with initial vehicle travel to the site, site clean-up and return to the yard. This task assumes a round trip travel distance of 60 miles. Incremental mileage over 60 miles will be evaluated on a per mile basis utilizing the per mile travel rate set forth in mob/demob incremental travel rate. Note: this is a one-time charge per event and includes personnel travel.

## 36. Contractor mob/demob incremental travel rate

per mile

This task consists of the total personnel, equipment and material costs (\$/mile) for incremental mileage above the 60 miles included in contractor mob/demob (Cost Ceiling Item number 35). This task includes all costs associated with vehicle and labor travel to and from the site. Note: this is a one-time charge per event and does not pertain to work crew travel on a daily basis.

#### 37. Contractor daily travel cost

per mile

This task consists of the total personnel, equipment and material costs (\$/mile) for work crew travel to and from the site on a daily basis.

#### **UST REMOVAL**

This task consists of the total contractor personnel, equipment and material costs (\$/tank) required for the following activities related to closure of a single UST: acquisition of all necessary permits, field supervision, tank removal, decommissioning, cutting, disposal, backfill, and site clean-up. Field supervision of UST removal and closure includes all logistics, including pre- and post-field planning activities. Assume no travel or mileage, no over excavation of petroleum hydrocarbon-impacted soil only the volume of soil necessary to remove the tank, and no asphalt/concrete replacement.

38.	One UST less than or equal to 4,000-gallons	per tank
39.	Cost for each additional tank	per tank
40.	One UST greater than 4,000-gallons and less than or equal To 15,000-gallons	per tank
41.	Cost for each additional tank	per tank
42.	One UST greater than 15,000-gallons	per tank
43.	Cost for each additional tank	per tank

#### OFF-SITE TRANSPORTATION OF TANKS

NOTE: No 2004 Cost Ceiling amount exists for Item Numbers 44 through 49. For cost tracking purposes only, please continue to use the appropriate Cost Ceiling Item Numbers to identify, on the Claimed Summary Worksheet, the per mile cost for off-site transportation of tanks. The amount(s) claimed is to be based on "time and materials" detail per A.A.C. §R18-12-605(E). Required supporting documentation is the primary service provider invoices, subcontractor invoices(s) and "death certificate" for each tank on file with ADEQ. The subcontractor invoice should relate incurred cost per tank size.

44.	One UST less than or equal to 4,000-gallons	NA
45.	Cost for each additional tank	NA
46.	One UST greater than 4,000-gallons and less than or Equal to 15,000-gallons	NA
47.	Cost for each additional tank	NA
48.	One UST greater than 15,000-gallons	NA
49.	Cost for each additional tank	NA

#### CONTRACTOR DRILLING-RELATED ACTIVITIES

## SOIL BORING AND SAMPLING MOB/DEMOB

This task consists of the total personnel, equipment and material costs (\$/event) for the following activities: preparation and loading of all appropriate equipment, materials, and supplies, including support vehicles. This task also includes all costs associated with initial rig and support vehicle travel to the site, site clean-up and return to the yard. This task assumes a round trip travel distance of 60 miles. Incremental mileage over 60 miles will be evaluated on a per mile basis utilizing the per mile travel rate set forth in the soil boring and sampling travel rate. Note: this is a one-time charge per event.

50. Hollow stem auger drilling method per event

51. All other drilling methods
(I.e. percussion, air rotary, rotosonic) per event

## SOIL BORING AND SAMPLING TRAVEL RATE

This task consists of the total personnel, equipment and material costs (\$/mile) for incremental mileage above the 60 miles included in contractor -mob/demob (Cost Ceiling Item Numbers 50 and 51). This task includes all costs associated with initial rig and support vehicle travel to and from the site. Site clean-up and return to the yard. Note: this is a one-time charge per event and does not pertain to drill crew travel on a daily basis.

52. Hollow stem auger drilling method per mile

53. All other drilling methods
(I.e. percussion, air rotary, rotosonic) per mile

54. Soil boring and sampling daily travel rate per mile

This task consists of the total personnel, equipment and material costs (\$/mile) for drill crew travel to and from the site on a daily basis.

#### SOIL BORING AND SAMPLING

This task consists of the total cost per foot (\$/foot) per boring for the following items/activities performed in accordance with ADEQ guidance at the time work is conducted. The task includes: drill rig support vehicles and crew; soil sampling at approximate 5 to 10 foot intervals; decontamination procedures; sampling equipment; moving between borehole locations; brass sleeves and associated sample collection and preservation materials, and drilling consumables/bits. Surface completion is not included in the per foot costs for drilling. Storage, (stockpile of soil on visqueen), transportation and disposal of drill cuttings, decontaminate rinsate, and additional investigation-derived fluids are not included in the soil boring and sampling item rate. This item applies to all borehole footage drilled. Assume no concrete coring, no restricted access, and no mob/demob or travel.

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55.	Hollow stem auger drilling method- vertical boring	per foot
56.	Hollow stem auger drilling method- angle boring	per foot
57.	Limited access drilling method- vertical boring	per foot
58.	Air rotary drilling method- vertical boring	per foot
59.	Rotosonic drilling method- vertical boring	per foot
60.	Dual wall percussion drilling method- vertical boring	per foot
61.	Dual wall percussion drilling method - angle boring	per foot
62.	Soil boring abandonment by grout:	per foot
	(All boring diameters)	per 100t

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This task consists of the total cost per foot (\$/foot) per boring for the labor and materials associated with the abandonment of soil borings by grouting. Assume no mob/demob or mileage.

## 63. Contractor standby rate, hollow stem auger

NA

NOTE: No 2004 Cost Ceiling amount exists for Item Number 63. For cost tracking purposes only, please continue to use this Cost Ceiling Item Number to identify, on the Claimed Summary Worksheet, hourly costs of contractor standby for a hollow stem auger. The amount(s) claimed is to be based on "time and materials" detail per A.A.C. §R18-12-605(E). Required supporting documentation is the primary service provider invoice, subcontractor invoice(s) and information specifying the type of rig, length of each delay and reason for each delay on file with ADEQ.

## 64. Contractor standby rate, all other rig types

NA

par foot

NOTE: No 2004 Cost Ceiling amount exists for Item Number 64. For cost tracking purposes only, please continue to use this Cost Ceiling Item Number to identify, on the Claimed Summary Worksheet, hourly costs of contractor standby for all rig types, other than hollow stem auger. The amount(s) claimed is to be based on "time and materials" detail per A.A.C. §R18-12-605(E). Required supporting documentation is the primary service provider invoice, subcontractor invoice(s) and information specifying the type of rig, length of each delay and reason for each delay on file with ADEQ.

#### **CONTRACTOR WELL INSTALLATION - RELATED ACTIVITIES**

#### WELL INSTALLATION

2 inch hollow stom augar

65

This task consists of the total cost per foot (\$/foot) per well for the following items/activities performed in accordance with ADEQ guidance at the time work is conducted. The task includes: drill rig support vehicles and crew; soil sampling at approximate 5 to 10 foot intervals; decontamination procedures; sampling equipment; moving between wells; brass sleeves and associated sample collection and preservation materials; drilling consumables/bits; well installation; well materials. Surface completion is not included in the per foot costs for drilling and well installation. Storage, (stockpile of soil on visqueen), transportation and disposal of drill cuttings, decontaminate rinsate, and additional investigation-derived fluids is not included in the well installation item rate. This task applies to all footages. Assume no concrete coring, no restricted access, no nested well configuration, no mob/demob or travel. [when calculating costs for a typical site, assume schedule 40 PVC piping and 30 feet of screen interval].

03.	2-inch hollow stem auger	per 100t
66.	4-inch hollow stem auger	per foot
67.	6-inch hollow stem auger	per foot
68.	2-inch air rotary	per foot
69.	4-inch air rotary	per foot
70.	6-inch air rotary	per foot

71. 2-inch rotosonic per foot

72. 4-inch rotosonic per foot

73. 6-inch rotosonic per foot

74. 2-inch dual wall percussion per foot

75. 4-inch dual wall percussion per foot

76. 6-inch dual wall percussion per foot

77. Monitor well surface completion: access manhole <= 12"

per well

This task consists of the total personnel, equipment and material costs (\$/well) required to install a three (3) foot square or less concrete pad with traffic rated (flush) manhole/vault in accordance with applicable ASTM standards. No mob/demob or travel.

# 78. Monitor well surface completion contractor cost:

Access manhole > 12" to <= 24"

per well

This task consists of the total personnel, equipment and material costs (\$/well) required to install a four (4) foot square or less concrete pad with traffic rated (flush) manhole/vault in accordance with applicable ASTM standards. No mob/demob or travel.

#### CONTRACTOR MONITOR WELL DEVELOPMENT

79. Mob/demob per event

This task consists of the total personnel, equipment and material costs (\$/event) for the following activities: preparation and loading of all appropriate equipment, materials, and supplies, including support vehicles. This task includes up to 60-miles round trip. Incremental mileage over 60 miles will be evaluated on a per mile basis utilizing the per mile travel rate set forth in line item below. Note: this is a one-time charge per event.

80. Travel cost per mile

This task consists of the total personnel, equipment and material costs (\$/mile) for incremental mileage above the 60 miles included in contractor -mob/demob. This task includes all costs associated with initial rig and support vehicle travel to and from the site. Note: this is a one-time charge per event and does not pertain to drill crew travel on a daily basis.

#### MONITOR WELL DEVELOPMENT

This task consists of the total personnel, equipment, and material costs (\$/well) required to develop a newly installed monitoring well in accordance with the current published ADEQ quality assurance plan and includes all appropriate

surface and downhole equipment, field instrumentation, and decontamination equipment. Assume no low yield wells, no mob/demob/travel, no consultant supervision, and typical site clean-up. This task does not pertain to purging associated with groundwater monitoring and sampling. Note: storage, transportation and disposal of investigation-derived waste is not included.

81. 2-inch monitor well: depth to water

less than 100 feet per well

82. 2-inch monitor well: depth to water equal to

or greater than 100 feet per well

83. 4-inch monitor well: depth to water

less than 100 feet per well

84. 4-inch monitor well: depth to water equal to

or greater than 100 feet per well

85. 6-inch monitor well: depth to water

less than 100 feet per well

86. 6-inch monitor well: depth to water equal to

Or greater than 100 feet per well

## GROUNDWATER MONITORING AND SAMPLING

87. Consultant make ready

NA

NOTE: No 2004 Cost Ceiling amount exists for Item Number 87. For cost tracking purposes only, please continue to use the appropriate Cost Ceiling Item Number to identify, on the Claimed Summary Worksheet, per well costs for compliance and investigative sampling. Consultant field work, if not included in another Cost Ceiling Item Number, is to be claimed using the appropriate personnel hourly rate. Equipment, if not included in a Cost Ceiling Item Number, is to be claimed using "time and materials" detail per A.A.C. §R18-12-605(E). Required supporting documentation is the primary service provider invoice and sampling results (including sample analysis) on file with ADEQ. The primary service provider invoice should identify the type of activity performed per identified well.

88. Groundwater monitoring field equipment day rate (Purging)

NA

NOTE: No 2004 Cost Ceiling amount exists for Item Numbers 88. For cost tracking purposes only, please continue to use the appropriate Cost Ceiling Item Number to identify, on the Claimed Summary Worksheet, per well costs for compliance and investigative sampling. Consultant field work, if not included in another Cost Ceiling Item Number, is to be claimed using the appropriate personnel hourly rate. Equipment, if not included in a Cost Ceiling Item Number, is to be claimed using "time and materials" detail per A.A.C. §R18-12-605(E). Required supporting documentation is the primary service provider invoice and sampling results (including sample analysis) on file with ADEQ. The primary service provider invoice should identify the type of activity performed per identified well

89. Groundwater monitoring field equipment day rate (Non-purging)

NA

NOTE: No 2004 Cost Ceiling amount exists for Item Numbers 90 through 96. For cost tracking purposes only, please continue to use the appropriate Cost Ceiling Item Number to identify, on the Claimed Summary Worksheet, per well costs for compliance and investigative sampling. Consultant field work, if not included in another Cost Ceiling Item Number, is to be claimed using the appropriate personnel hourly rate. Equipment, if not included in a Cost Ceiling Item Number, is to be claimed using "time and materials" detail per A.A.C. §R18-12-605(E). Required supporting documentation is the primary service provider invoice and sampling results (including sample analysis) on file with ADEQ. The primary service provider invoice should identify the type of activity performed per identified well.

## COMPLIANCE AND INVESTIGATIVE SAMPLING METHODOLOGY

(With and Without Purging)

90.	2-inch monitor well: depth to water less than 100 feet	NA
91.	2-inch monitor well: depth to water equal to or greater than 100 feet	NA
92.	4-inch monitor well: depth to water less than 100 feet	NA
93.	4-inch monitor well: depth to water equal to or greater than 100 feet	NA
94.	6-inch monitor well: depth to water less than 100 feet	NA
95.	6-inch monitor well: depth to water equal to or greater than 100 feet	NA
96.	Investigative sampling methodology (Purging is not required)	NA

## 97. Consultant fluid level monitoring

NA

NOTE: No 2004 Cost Ceiling amount exists for Item Number. 97. For cost tracking purposes only, please continue to use this Cost Ceiling Item Number to identify, on the Claimed Summary Worksheet, per well costs for fluid level monitoring. Consultant field work, if not included in another Cost Ceiling Item Number, is to be claimed using the appropriate personnel hourly rate. Equipment, if not included in a Cost Ceiling Item Number, is to be claimed using "time and materials" detail per A.A.C. §R18-12-605(E). Required supporting documentation is the primary service provider invoice and results of the free product removal on file with ADEQ. The primary service provider invoice should identify the type of activity performed per identified well.

98. Free product removal via hand bailing or hand pumping

NA

NOTE: No 2004 Cost Ceiling amount exists for Item Number. 98. For cost tracking purposes only, please continue to use this Cost Ceiling Item Number to identify, on the Claimed Summary Worksheet, per well costs for free product removal via hand bailing or hand pumping. Consultant field work, if not included in another Cost Ceiling Item Number, is to be claimed using the appropriate personnel hourly rate. Equipment, if not included in a Cost Ceiling Item Number, is to be claimed using "time and materials" detail per A.A.C. §R18-12-605(E). Required supporting documentation is the primary service provider invoice and results of the free product removal on file with ADEQ. The primary service provider invoice should identify the type of activity performed per identified well.

99. Free product removal via dedicated removal device

NA

NOTE: No 2004 Cost Ceiling amount exists for Item Number 99. For cost tracking purposes only, please continue to use this Cost Ceiling Item Number to identify, on the Claimed Summary Worksheet, per well costs for free product removal via dedicated removal device. Consultant field work, if not included in another Cost Ceiling Item Number, is to be claimed using the appropriate personnel hourly rate. Equipment, if not included in a Cost Ceiling Item Number, is to be claimed using "time and materials" detail per A.A.C. §R18-12-605(E). Required supporting documentation is the primary service provider invoice and results of the free product removal on file with ADEQ. The primary service provider invoice should identify the type of activity performed per identified well.

# PILOT AND FEASIBILITY TESTING

NOTE: No 2004 Cost Ceiling amount exists for Item Numbers 100 through 104. For cost tracking purposes only, please continue to use the appropriate Cost Ceiling Item Number to identify, on the Claimed Summary Worksheet, per test costs for pilot and feasibility tests. Consultant field work, if not included in another Cost Ceiling Item Number, is to be claimed using the appropriate personnel hourly rate. Equipment, if not included in a Cost Ceiling Item Number, is to be claimed using "time and materials" detail per A.A.C. §R18-12-605(E). Required supporting documentation is the primary service provider invoice and test results on file with ADEQ. The primary service provider invoice should identify the type of test performed; date(s) performed and test results.

100. Aquifer pump test

NA

101. Aquifer slug test

NA

102.	Soil vapor extraction (SVE) test	NA
103.	SVE / air sparge test	NA
104.	Bioremediation test	NA

## REMEDIATION ACTIVITIES

## 105. Remedial excavation

per cubic yard

This task consists of the total price per cubic yard (\$/yd³) for the following item: bulk soil excavation (contaminated soil) for all tonnage. Includes total personnel and equipment necessary to complete soil excavation and loading of non-containerized bulk soil. Assume no trenching around utility lines and/or building foundations.

106. Bulk soil transportation

NA

NOTE: No 2004 Cost Ceiling amount exists for Item Number 106. For cost tracking purposes only, please continue to use this Cost Ceiling Item Number to identify, on the Claimed Summary Worksheet, per ton costs for bulk soil transportation. The amount(s) claimed is to be based on "time and materials" detail per A.A.C. §R18-12-605(E). Required supporting documentation is the primary service provider invoice, subcontractor invoice(s) and the bill of lading and hauler's invoice on file with ADEQ.

## 107. Backfill and compaction

per ton

This task consists of the total price per ton (\$/ton) for the following item: total personnel and equipment costs necessary to backfill and compact a remedial excavation. This item includes all mob/demob of personnel and equipment. This task assumes the use of import backfill material and includes density testing and reporting.

108. Containerized contaminated water disposal

per drum

This task includes proper disposal of containerized contaminated water at an ADEQ approved facility. This price does not include consultant's time to characterize or manifest the water for disposal and/or analytical cost.

109. Containerized contaminated soil disposal

per drum

This task includes proper disposal of containerized contaminated soil at an ADEQ approved facility. This price does not include consultant's time to characterize or manifest the soil for disposal.

Note: containerized contaminated soil disposal per bin should not be claimed using, on the Claimed Summary Worksheet, Cost Ceiling Item Number 109. The amount(s) claimed for per bin soil disposal is to be based on "time and materials" detail per A.A.C. §R18-12-605(E).

#### 110. Waste characterization

NOTE: No 2004 Cost Ceiling amount exists for Item Number 110. For cost tracking purposes only, please continue to use this Cost Ceiling Item Number to identify, on the Claimed Summary Worksheet, costs associated with this task. The amount(s) claimed is to be based on "time and materials" detail per A.A.C. §R18-12-605(E). Required supporting documentation is the primary service provider invoice, subcontractor invoice(s) and documentation of work claimed on file with ADEQ.

## 111. Landfill disposal of petroleum contaminated soil

per ton

This task consists of the total price per ton (\$/ton) for landfill disposal of petroleum contaminated soil at a properly permitted landfill facility. This task does not include mob/demob or transportation costs for equipment and/or personnel.

112. Thermal remediation of petroleum contaminated soil

(Ex-situ, on-site, utilizing a portable facility)

per ton

This task consists of the total price per ton (\$/ton) for the following activity: on-site, ex-situ thermal remediation of PCs using a permitted portable facility.

113. Thermal remediation of petroleum contaminated soil

(Ex-situ, off-site, utilizing a fixed facility)

per ton

For quantities greater than 40 tons, this task consists of the total price per ton (\$/ton) for the following activity: off-site, ex-situ thermal remediation of PCs using a permitted fixed facility.

114. Bioremediation of petroleum contaminated soil

(Ex-situ, off-site, utilizing a fixed facility)

per ton

This task consists of the total price per ton (\$/ton) for the following item: off-site, ex-situ bioremediation of PCs at permitted fixed facility. Does not apply to on-site portable bioremediation facility.

115. Construction and installation of soil and/or

Groundwater remedial system

DO NOT USE

NOTE: No 2004 Cost Ceiling amount exists for Item Number 115. Do not use this Item Number. The amount(s) claimed for remedial system installation, unless included in a Cost Ceiling Item Number, is to be based on "time and materials" detail per A.A.C. §R18-12-605(E).

#### 116. Remedial system operation and maintenance

NA

NOTE: No 2004 Cost Ceiling amount exists for Item Number 116. Consultant field work, when not included in another Cost Ceiling Item Number, is to be claimed using the appropriate personnel hourly rate. Equipment, if not included in a Cost Ceiling Item Number, is to be claimed using "time and materials" detail per A.A.C. §R18-12-605(E). Required supporting documentation is the primary service provider invoice, any subcontractor invoice(s) and information on the operation and maintenance activity performed on file with ADEQ. The primary service provider invoice should include the type of work performed, date(s) when performed, reason for each operation/maintenance visit and sufficient information to determine the operational efficiency of the system.

#### REPORTING ACTIVITIES

117. 14-day release confirmation report

per report

Note: Cost Ceiling Item Number 117 applies only to a 14-day report that is not subject to the UST Release Reporting and Corrective Action rules (A.A.C. R18-12-260 through R18-12-264.01 - effective August 22, 2002). For applicability of these rules, see A.A.C. R18-12-250. Reports submitted in accordance with the UST Release Reporting and Corrective Action rules must use the appropriate Cost Ceiling Item Numbers 200 through 210.

This task consists of the total personnel, equipment, and material costs to prepare and submit the one to four page release confirmation report in response to a confirmed release based on the presence of free product or laboratory detectable contaminant concentrations. This report is to be prepared in accordance with ADEQ release reporting requirements. This task also includes a telephone call for 24 hour release notification.

# ADEQ APPROVED STANDARD SITE CHARACTERIZATION REPORT

Note: Cost Ceiling Item Numbers 118 through 122 apply only to a site characterization report that is not subject to the UST Release Reporting and Corrective Action rules (A.A.C. R18-12-260 through R18-12-264.01 - effective August 22, 2002). For applicability of these rules, see A.A.C. R18-12-250. Reports submitted in accordance with the UST Release Reporting and Corrective Action rules must use the appropriate Cost Ceiling Item Numbers 200 through 210.

# 118. ADEQ-approved standard site characterization report up to (4) soil borings

per report

This task consists of the total personnel, equipment, and material costs (\$/report) to complete a site characterization report (SCR). The SCR should include a site conceptual model, data collection, evaluation and documentation including all figures and reports in the format specified by the ADEQ site characterization manual (SCM) guidance. Required attachments to the scr include a site location map, site plan, soil contamination map, geologic cross sections, soil sampling analytical results, laboratory reports, chain-of-custody and laboratory QA/QC. Activities include the personnel time for preparation of the report including time for review, clerical support, and all other direct costs such as copying, binding and postage. The site characterization report should only be submitted if the site has been adequately defined in accordance with ADEQ guidance. Field time for pilot and feasibility tests are not to be included in the report preparation task.

# 119. ADEQ- approved standard site characterization report

incremental cost increase per soil boring

per boring

This task consists of the total personnel, equipment, and material costs (\$/boring) for each additional boring over and above the 4 soil borings.

# 120. ADEQ-approved standard site characterization report

up to (4) groundwater monitor wells

per report

This task consists of the total personnel, equipment, and material costs (\$/report) to complete the SCR. The SCR should include a site conceptual model, data collection, evaluation and documentation including all figures and reports in the format specified by the ADEQ SCM guidance. Required attachments to the scr include a site location map, site plan, soil and groundwater contamination maps, geologic cross sections, soil sampling analytical results, laboratory reports, chain-of-custody and laboratory QA/QC reports. Activities include the personnel time for preparation of the report including time for review, clerical support, and all other direct costs such as copying, binding and postage. The site characterization report should only be submitted if the site has been adequately defined in accordance with ADEQ guidance. Field time or pilot and feasibility tests are not to be included in the report preparation task.

## 121. ADEQ-approved standard site characterization report

incremental cost increase per groundwater monitor well

per well

This task consists of the total personnel, equipment, and material costs (\$/well) for each additional well over and above the 4 groundwater monitor wells comprising a standard groundwater only or soil and groundwater SCR.

122. ADEQ-approved standard site characterization report

up to (4) soil borings and (4) groundwater monitor wells

per report

This task consists of the total personnel, equipment, and material costs (\$/report) to complete the SCR. The SCR should include: a site conceptual model, data collection, evaluation and documentation including all figures and reports in the format specified by the ADEQ SCM guidance. Required attachments to the SCR include a site location map, site plan, soil and groundwater contamination maps, geologic cross sections, soil sampling analytical results, laboratory reports, and chain-of-custody and laboratory QA/QC reports. Activities include the personnel time for preparation of the report including time for review, clerical support, and all other direct costs such as copying, binding and postage. The site characterization report should only be submitted if the site has been adequately defined in accordance with ADEQ guidance. Field time or pilot and feasibility tests are not to be included in the report preparation task. Incremental per boring and monitor well costs may be claimed for each soil boring and groundwater monitor well over the four set fourth in this task (See Cost Ceiling Item Numbers 119 and 121, respectively).

## REMEDIAL REPORTS

Note: Cost Ceiling Item Numbers 123 through 130 apply only to a groundwater monitoring, remedial progress, post-remediation closure or site de-commissioning letter report that is not subject to the UST Release Reporting and Corrective Action rules (A.A.C. R18-12-260 through R18-12-264.01 - effective August 22, 2002). For applicability of these rules, see A.A.C. R18-12-250. The UST Release Reporting and Corrective Action rules do not provide for groundwater monitoring, remediation status or site-decommissioning letter reports. Groundwater monitoring results and remedial progress reported under the rule should be included in the applicable Cost Ceiling Item Numbers 200 through 210. See General Notes item 9.

123. Initial periodic groundwater monitoring report up to (4) groundwater monitor wells

per report

This task consists of the total personnel, equipment, and material costs (\$/report) necessary to complete the first periodic monitoring report. The report conveys results of the first sampling event conducted at the site and must include the following: complete description of all work completed; periodic water-level-elevation data for each groundwater monitor and recovery well; periodic free product thickness data for each well containing free product; analytical results for groundwater sampling site diagrams, a groundwater contaminant concentration map, up to (2) hydrographs and analysis of data. Activities for the report include the personnel time for preparation, including time for review, clerical support, and all other direct costs such as copying, binding and postage.

124. Initial periodic groundwater monitoring report incremental report

preparation cost for each additional groundwater monitor well over (4)

per well

This task consists of the total personnel, equipment, and material costs (\$/well) for each additional well over and above the (4) groundwater monitor wells comprising a standard groundwater monitoring report.

125. Subsequent periodic groundwater monitoring report

up through (4) groundwater monitor wells

per report

This task consists of the total personnel, equipment, and material costs (\$/report) necessary to complete each subsequent groundwater monitoring report. Each report must include the following: complete description of all work completed subsequent to last periodic report; periodic water-level elevation data for each groundwater monitor and recovery well; periodic free product thickness data for each well containing free product; analytical results for groundwater sampling, site diagrams, a groundwater contaminate concentration map, up to (2) hydrographs and analysis of data. Activities for the report include the personnel time for preparation, including time for review, clerical support, and all other direct costs such as copying or binding.

# 126. Subsequent periodic groundwater monitoring report incremental

report preparation cost for each additional groundwater monitor well over (4) per well

This task consists of the total personnel, equipment, and material costs (\$/well) for each additional well over and above the (4) groundwater monitor wells comprising a standard groundwater monitoring report.

## 127. Initial periodic remedial progress report

(Soil and groundwater)

per report

This task consists of the total personnel, equipment, and material costs (\$/report) required to prepare the initial periodic remedial progress report for passive and active remediation. This report must include a description of all work performed, hydrocarbon recovery, periodic monitoring results, influent and effluent system sampling results, amount of media treated, site diagrams, and analysis of current and historical data. Activities include the personnel time for preparation of the report including time for review, clerical support, and all other direct costs such as copying, binding, and postage. Note: this report is typically no more than two pages of text with attached data.

## 128. Subsequent periodic remedial progress report

(Soil and groundwater)

per report

This task consists of the total personnel, equipment, and material costs (\$/report) required to prepare the subsequent remedial progress reports for passive and active remediation. This report must include description of all work performed, periodic monitoring results, in fluent and effluent system sampling results, amount of media treated, site diagrams, and analysis of current and historical data. Activities include the personnel time for preparation of the report including time for review, clerical support, and all other direct costs such as copying and binding. Note: this report is typically no more than two pages of text with attached data.

## 129. Post-remediation closure report

per report

Material costs (\$/report) required to prepare a post-remediation closure report. This report must include description of all work performed in association with confirmation borings, analytical results, amount of media treated, site diagrams, and analysis of current data. This report is typically submitted when analytical results indicate that contaminant concentrations have been reduced to levels below applicable regulatory thresholds. Information contained within this report must ultimately result in case closure. Activities include the personnel time for preparation of the report including time for review, clerical support, and all other direct costs such as copying and binding. Note: this report is typically no more than two pages of text with attached data.

## 130. Site de-commissioning letter report

per report

Site de-commissioning letter report: this task consists of the total personnel, equipment, and material costs (\$/report) for preparation of a site de-commissioning letter report. This letter report is not to exceed (2) pages in length and is to be limited to a summary of tasks conducted to de-commission a closed site.

#### SAF APPLICATION PREPARATION

## 131. Pre-approval application

per application

This task consists of the total personnel, equipment, and material costs (\$/application) required to prepare an SAF pre-approval application. Activities include preparation of the application including review, clerical support, and all other direct costs such as copying, binding and postage. Item does not include any work plan preparation; only preparation of the application.

## 132. Reimbursement/direct pay application

(<= 2 primary [main provider] invoices)

per application

This task consists of the total personnel, equipment, and material costs (\$/application) required to prepare an SAF reimbursement application. Activities include preparation of the application including review, clerical support, and

all other direct costs such as copying, binding and postage. Assume that the application has no more than 2 primary (main provider) invoices.

## 133. Reimbursement/direct pay application

(2< primary [main provider] invoices<=5)

per application

This task consists of the total personnel, equipment, and material costs (\$/application) required to prepare a SAF reimbursement application. Activities include preparation of the application including review, clerical support, and all other direct costs such as copying, binding and postage. Assume 2 to 5 invoices.

## 134. Reimbursement/direct pay application

(5< primary [main provider] invoices<=10)

per application

This task consists of the total personnel, equipment, and material costs (\$/application) required to prepare an SAF reimbursement application. Activities include preparation of the application including review, clerical support, and all other direct costs such as copying, binding and postage. Assume 6 to 10 invoices.

## **EQUIPMENT RENTAL RATES**

## 135. SVE system with thermal oxidizer (100 cfm)

per month

Equipment rental (\$/month) to include skid or trailer mounted vapor extraction equipment including vacuum blower and water knockout, and thermal oxidizer with appropriate gauges and equipment necessary to monitor system effectiveness and meet appropriate permitting (and other) regulatory requirements. Cost includes a chart recorder capable of recording on a weekly or monthly basis. Does not include cost of utilities to operate the system.

## 136. SVE system with thermal oxidizer (250 cfm)

ner month

Equipment rental (\$/month) to include skid or trailer mounted vapor extraction equipment including vacuum blower and water knockout, and thermal oxidizer with appropriate gauges and equipment necessary to monitor system effectiveness and meet appropriate permitting (and other) regulatory requirements. Cost includes a chart recorder capable of recording on a weekly or monthly basis. Does not include cost of utilities to operate the system.

## 137. SVE system with thermal oxidizer (500 cfm)

per month

Equipment rental (\$/month) to include skid or trailer mounted vapor extraction equipment including vacuum blower and water knockout, and thermal oxidizer with appropriate gauges and equipment necessary to monitor system effectiveness and meet appropriate permitting (and other) regulatory requirements. Cost includes a chart recorder capable of recording on a weekly or monthly basis. Does not include cost of utilities to operate the system.

## 137. SVE system with thermal oxidizer (700 cfm)

per month

Equipment rental (\$/month) to include skid or trailer mounted vapor extraction equipment including vacuum blower and water knockout, and thermal oxidizer with appropriate gauges and equipment necessary to monitor system effectiveness and meet appropriate permitting (and other) regulatory requirements. Cost includes a chart recorder capable of recording on a weekly or monthly basis. Does not include cost of utilities to operate the system.

## 139. SVE system with catalytic oxidizer (100 cfm)

per month

Price per month to include skid or trailer mounted vapor extraction equipment including vacuum blower and water knockout, and catalytic oxidizer with appropriate gauges and equipment necessary to monitor system effectiveness and meet appropriate permitting (and other) regulatory requirements. Cost includes a chart recorder capable of recording on a weekly or monthly basis and catalyst beds capable of achieving at least 90% destruction efficiency. Does not include cost of utilities to operate the system.

## 140. SVE system with catalytic oxidizer (250 cfm)

per month

Price per month to include skid or trailer mounted vapor extraction equipment including vacuum blower and water knockout, and catalytic oxidizer with appropriate gauges and equipment necessary to monitor system effectiveness and meet appropriate permitting (and other) regulatory requirements. Cost includes a chart recorder capable of recording on a weekly or monthly basis and catalyst beds capable of achieving at least 90% destruction efficiency. Does not include cost of utilities to operate the system.

## 141. SVE system with catalytic oxidizer (500 cfm)

per month

Price per month to include skid or trailer mounted vapor extraction equipment including vacuum blower and water knockout, and catalytic oxidizer with appropriate gauges and equipment necessary to monitor system effectiveness and meet appropriate permitting (and other) regulatory requirements. Cost includes a chart recorder capable of recording on a weekly or monthly basis and catalyst beds capable of achieving at least 90% destruction efficiency. Does not include cost of utilities to operate the system.

142. Air sparge system (up to 100 cfm and up to 12 psi)

per month

Price is per month to include skid mounted air sparge system including blower or compressor to generate up to 100 cfm flow rate and up to 12 psi pressure, and appropriate gauges and control panel. Does not include cost of utilities to operate the system.

143. Air sparge system (up to 100 cfm and 12 to 100 psi)

per month

Price is per month to include skid mounted air sparge system including blower or compressor to generate up to 100 cfm flow rate and 12 up to 100 psi pressure, and appropriate gauges and control panel. Does not include cost of utilities to operate the system.

144. SVE/air sparge portable pilot test unit

per day

NOTE: No 2004 Cost Ceiling amount exists for Item Number 144. For cost tracking purposes only, please continue to use this Cost Ceiling Item Number to identify, on the Claimed Summary Worksheet, per day rental cost for a SVE/air sparge portable pilot test unit. The amount(s) claimed is to be based on "time and materials" detail per A.A.C. §R18-12-605(E). Required supporting documentation is the primary service provider and the vender invoices.

145. Blower (160 cfm)

per month

Price is per month for an explosion proof, regenerative blower with 160 cfm capacity.

146. Blower (280 cfm)

per month

Price is per month for an explosion proof, regenerative blower with 280 cfm capacity.

147. Manual-operated hand auger sampling kit

(Hand auger/brass sleeves)

per day

Equipment rental: daily rate (\$/day) for manual-operated hand auger and sampling kit (hand auger, brass sleeves, etc.).

148. 55-gallon, dot-approved drum

per drum

Equipment cost: total cost per drum (\$/drum) for a 55-gallon, dot-approved, drum.

#### LABORATORY RATES

#### MOBILE LABORATORY RATES

## 149. Mobile lab mob/demob rate for one person crew

per event

Total mobile lab make ready - mob/demob (\$/event) includes the following: preparation and loading of all appropriate equipment, materials, and supplies, including support vehicles, on-site equipment calibration, clean-up, and equipment decontamination. This task also includes all costs associated with initial vehicle travel to the site, site clean-up and return to the yard. This task assumes a round trip travel distance of 60 miles. Incremental mileage over 60 miles will be evaluated on a per mile basis utilizing the per mile travel rate set forth in mob/demob incremental travel rate. Note: this is a one-time charge per event and includes personnel travel. Assume a one person crew.

## 150. Mobile lab mob/demob rate for two person crew

per event

Total mobile lab - mob/demob (\$/event) includes the following: preparation and loading of all appropriate equipment, materials, and supplies, including support vehicles, on-site equipment calibration, clean-up, and equipment decontamination. This task also includes all costs associated with initial vehicle travel to the site, site clean-up and return to the yard. This task assumes a round trip travel distance of 60 miles. Incremental mileage over 60 miles will be evaluated on a per mile basis utilizing the per mile travel rate set forth in mob/demob incremental travel rate. Note: this is a one-time charge per event and includes personnel travel. Assume a two-person crew.

151. Mobile lab - mob/demob incremental travel

rate for a one person crew

per mile

This task consists of the total personnel, equipment and material costs (\$/mile) for incremental mileage above the 60 miles included in mobile lab mob/demob (Cost Ceiling Item Number 149). This task includes all costs associated with vehicle and labor travel to and from the site. Note: this is a one-time charge per event and does not pertain to work crew travel on a daily basis. Assume a one person crew.

152. Mobile lab - mob/demob incremental travel

rate for a two person crew

per mile

This task consists of the total personnel, equipment and material costs (\$/mile) for incremental mileage above the 60 miles included in mobile lab mob/demob (Cost Ceiling Item Number 150). This task includes all costs associated with vehicle and labor travel to and from the site. Note: this is a one-time charge per event and does not pertain to work crew travel on a daily basis. Assume a two person crew.

153. On-site mobile lab rate for one person crew

Soil and groundwater analysis

per hour

Total on-site mobile lab rate (\$/hour; 6-hour minimum) for soil and groundwater analysis. Mobile lab must be ADHS-certified. Assume one person crew.

154. On-site mobile lab rate for two person crew

Soil and groundwater analysis

per hour

Total on-site mobile lab rate (\$/hour; 6-hour minimum) for soil and groundwater analysis. Mobile lab must be ADHS-certified. Assume two person crew.

## ORGANIC ANALYSIS PER SAMPLE

per sample

155. Lab analysis (\$/test): total petroleum hydrocarbons (TPH) by ADHS method 418.1 AZ using an ADHS-certified laboratory (soil only)

- 156. Lab analysis (\$/test): TPH by ADHS method 8015AZR1 (C1-C32 DRO-ORO) using an ADHS-certified laboratory (soil only)
- 157. Lab analysis (\$/test): TPH by EPA method 8015 AZR1 (modified)/ (C6-C10) (air only)
- 158. Lab analysis (\$/test): TPH (C6-C10)/BTEX by EPA method 8015 AZR1 (modified) /8021B (air only)

8021B SOIL per sample

- 159. Lab analysis (\$/test): aromatic VOCs (BTEX) by EPA method 8021B using an ADHS-certified laboratory (soil only)
- 160. Lab analysis (\$/test): halogenated VOCs by EPA method 8021B; Arizona target compounds (AZ list) using an ADHS-certified laboratory (Soil only)
- 161. Lab analysis (\$/test): EPA method 8021B; Arizona target compounds (AZ list) using an ADHS-certified laboratory (soil only)
- 162. Lab analysis (\$/test): full list volatile organics by EPA method 8021B using an ADHS-certified laboratory (soil only)

## 8021B GROUNDWATER

per sample

- 163. Lab analysis: (\$/test): aromatic VOCs (BTEX) by EPA 8021B using an ADHS-certified laboratory (groundwater only)
- Lab analysis (\$/test): halogenated VOCs by EPA method 8021B for Arizona target compounds (AZ list) using an ADHS-certified laboratory (Groundwater only)
- 165. Lab analysis (\$/test): EPA method 8021B; Arizona target compounds (AZ list) using an ADHS-certified laboratory (groundwater only)
- Lab analysis (\$/test): full list volatile organics by EPA method 8021B using an ADHS-certified laboratory (Groundwater only)

8021B AIR per sample

Lab analysis (\$/test): aromatic VOCs (BTEX) by EPA method 8021B (Air only)

168. Lab analysis (\$/test): halogenated VOCs by EPA method 8021B; Arizona target compounds (AZ list) using an ADHS-certified laboratory (air only)

8260B SOIL per sample

- 169. Lab analysis (\$/test):) EPA method 8260B; Arizona target compounds (AZ list) using an ADHS-certified laboratory (soil only)
- 170. Lab analysis (\$/test): full list volatile organics by EPA method 8260B using an ADHS-certified laboratory (Soil only)

8260B GROUNDWATER

per sample

- 171. Lab analysis (\$/test): EPA method 8260B; Arizona target compounds (AZ list) using an ADHS-certified laboratory (groundwater only)
- 172. Lab analysis (\$/test): full list volatile organics by EPA method 8260B using an ADHS-certified laboratory (groundwater only)

## POLYNUCLEAR AROMATIC HYDROCARBONS (PAHS)

per sample

- 175. Lab analysis (\$/test): semi-volatile organics (PAHS) by EPA method 8270C using an ADHS-certified laboratory (soil only)
- 174. Lab analysis (\$/test): semi-volatile organics (PAHS) by EPA method 8270C using an ADHS-certified laboratory (Groundwater only)
- 175. Lab analysis (\$/test): polynuclear aromatic hydrocarbons (PAHS) by EPA method 8310 using an ADHS-certified laboratory (Soil only)
- 176. Lab analysis (\$/test): polynuclear aromatic hydrocarbons (PAHS) by EPA method 8310 using an ADHS-certified laboratory (Groundwater only)

## WASTE CHARACTERIZATION ANALYSIS

per sample

- 177. Lab analysis (\$/test): total petroleum hydrocarbons (TPH) by EPA method 418.1 using an ADHS-certified laboratory (groundwater only) for waste characterization and permit requirement purposes only. Note: this test is not to be used for UST regulatory purposes such as groundwater monitoring.
- 178. Lab analysis (\$/test): TCLP extraction lead (Pb) analysis by EPA method 1311 and the appropriate SW846 EPA method using an ADHS-certified laboratory
- 179. Lab analysis (\$/test): tclp extraction by EPA method 1311 analysis of 8 RCRA metals by appropriate SW846 EPA method, using an ADHS-certified laboratory
- 180. Lab analysis (\$test): ignitability test by EPA method 1010 (liquid only)
- 181. Lab analysis (\$/test): ignitability test by EPA method 1010 modified (soil only)

- 182. Lab analysis (\$/test): corrositivity pH by EPA method 9045 (soil only)
- 183. Lab analysis (\$/test): corrositivity pH by EPA method 9040 (groundwater only)
- 184. Lab analysis (\$/test): paint filter free liquids by EPA method 9095
- 185. Lab analysis (\$/test): polychlorinated biphenyls (soil) by EPA method 8082
- 186. Lab analysis (\$/test): lead by an approved SW846 EPA method using an ADHS-certified laboratory (soil only).

## BIOFEASIBILITY / BIOTREATABILITY ANALYSIS

per sample

- 187. Lab analysis (\$/test): phosphate-P by an approved EPA/ASTM method (Soil only)
- 188. Lab analysis (\$/test): nitrate + nitrite-N by an approved EPA/ASTM method (soil only).
- 189. Lab analysis (\$/test): nitrogen using an ADHS-certified laboratory (soil only)
- 190. Lab analysis (\$/test): alkalinity by EPA method 310.1 using an ADHS-certified laboratory (Groundwater only)
- 191. Lab analysis (\$/test): total organic carbon-- by EPA method 415.1
- 192. Lab analysis (\$/test): total organic carbon EPA method 9060
- 193. Lab analysis (\$/test): ammonia by EPA method 350.3 or other ASTM method (groundwater)
- 194. Lab analysis (\$/test): sulfate by EPA method 375.2 (groundwater only) or other ASTM method
- 195. Lab analysis (\$/test): nitrate by EPA method 353.2 (groundwater only)
- 196. Lab analysis (\$/test): alkalinity by EPA method 310.1 modified
- 197. Lab analysis (\$/test): total dissolved solids by EPA method 160.1
- 198. Lab analysis (\$/test): total solids by EPA method 160.3
- 199. Lab analysis (\$/test): biochemical oxygen demand (BOD) by EPA method 405.1[note: aqueous matrices only]

# RELEASE REPORTING/CORRECTIVE ACTION FORMS (A.A.C. R18-12-260 THROUGH R18-12-264.01)

200. Release Reporting Form - per A.A.C. R18-12-260(A) and R18-12-260(B) per form

NOTE: No 2004 Cost Ceiling amount exists for Item Number 200. The release reporting form is used only if the release is not reported to ADEQ by other means. For cost tracking purposes only, please use this Cost Ceiling Item Number to identify, on the Claimed Summary Worksheet, costs of a complete ADEQ release reporting form that meets the requirements of A.A.C. R18-12-260(A) and R18-12-260(B). For costs not included in a Cost Ceiling Item Number, the amount(s) claimed is to be based on "time and materials" detail per A.A.C. R18-12-605(E). Required supporting documentation is the primary service provider invoice and the indicated reporting Form and cover page with attachments on file with ADEQ.

201. Confirmed release 14-day report - per A.A.C. R18-12-260(C) per report

NOTE: No 2004 Cost Ceiling amount exists for Item Number 201. For cost tracking purposes only, please use this Cost Ceiling Item Number to identify, on the Claimed Summary Worksheet, costs of a complete ADEQ required and approved Confirmed Release 14-Day Report that meets the requirements of A.A.C. R18-12-260(C). For costs not included in a Cost Ceiling Item Number, the amount(s) claimed is to be based on "time and materials" detail per A.A.C. R18-12-605(E). Required supporting documentation is the primary service provider invoice and the indicated reporting Form and cover page with attachments on file with ADEQ.

202. Initial Site Characterization Report - per A.A.C. R18-12-261(D) per report

NOTE: No 2004 Cost Ceiling amount exists for Item Number 202. For cost tracking purposes only, please use this Cost Ceiling Item Number to identify, on the Claimed Summary Worksheet, costs of a complete ADEQ required and approved initial site characterization report that meets the requirements of A.A.C. R18-12-261(D). For costs not included in a Cost Ceiling Item Number, the amount(s) claimed is to be based on "time and materials" detail per A.A.C. R18-12-605(E). Required supporting documentation is the primary service provider invoice and the indicated reporting Form and cover page with attachments on file with ADEQ.

203. LUST Site Classification Form - per A.A.C. R18-12-261.01(D) and R18-12-261.01(E)

per form (when not included in another report)

NOTE: No 2004 Cost Ceiling amount exists for Item Number 203. For cost tracking purposes only, please use this Cost Ceiling Item Number to identify, on the Claimed Summary Worksheet, costs of a complete ADEQ required and approved LUST site classification form that meets the requirements of A.A.C. R18-12-261.01(D) and R18-12-261.01(E). If A.A.C. R18-12-260 through R18-12-264.01 require this report to be a component of another report, preparation costs for the LUST site classification form cannot be claimed in addition to the preparation costs of the other report. For costs not included in a Cost Ceiling Item Number, the amount(s) claimed is to be based on "time and materials" detail per A.A.C. R18-12-605(E). Required supporting documentation is the primary service provider invoice and the indicated reporting Form and cover page with attachments on file with ADEQ.

204. Free Product Report - per A.A.C. R18-12-261.02(C)

per report -(when not included in another report)

NOTE: No 2004 Cost Ceiling amount exists for Item Number 204. For cost tracking purposes only, please use this Cost Ceiling Item Number to identify, on the Claimed Summary Worksheet, costs of a complete ADEQ required and approved free product report that meets the requirements of A.A.C. R18-12-261.02(C). If A.A.C. R18-12-260 through R18-12-264.01 requires this report to be a component of another report, preparation costs for the free product report cannot be claimed in addition to the preparation costs of the other report. For costs not included in a Cost Ceiling Item Number, the amount(s) claimed is to be based on "time and materials" detail per A.A.C. R18-12-605(E). Required supporting documentation is the primary service provider invoice and the indicated reporting Form and cover page with attachments on file with ADEQ.

205. LUST Site Characterization Report - per A.A.C. R18-12-262(D) for Characterization of the Full LUST Site
 (Does Not Apply to A.R.S. 49-1053 On-Site Investigations)

NOTE: No 2004 Cost Ceiling amount exists for Item Number 205. For cost tracking purposes only, please use this Cost Ceiling Item Number to identify, on the Claimed Summary Worksheet, costs of an ADEQ required and approved full LUST site characterization report that meets the requirements of A.A.C. R18-12-262(D). Do not use this Cost Ceiling Item Number to claim costs of a A.R.S. 49-1053 on-site investigation report. For costs not included in a Cost Ceiling Item Number, the amount(s) claimed is to be based on "time and materials" detail per A.A.C. R18-12-605(E). Required supporting documentation is the primary service provider invoice and the approved full LUST site characterization report and cover page on file with ADEQ

206. Notice of soil remediation form - per A.A.C. R18-7-209(A) per form

NOTE: No 2004 Cost Ceiling amount exists for Item Number 206. For cost tracking purposes only, please use this Cost Ceiling Item Number to identify, on the Claimed Summary Worksheet, costs of an ADEQ required notice of soil remediation site status report that meets the requirements of A.A.C. R18-7-209(A). For costs not included in a Cost Ceiling Item Number, the amount(s) claimed is to be based on "time and materials" detail per A.A.C. R18-12-605(E). Required supporting documentation is the primary service provider invoice and the notice of soil remediation site status report and cover page on file with ADEQ.

207. Corrective Action Plan - per A.A.C. R18-12-263.02(B) per plan

NOTE: No 2004 Cost Ceiling amount exists for Item Number 207. For cost tracking purposes only, please use this Cost Ceiling Item Number to identify, on the Claimed Summary Worksheet, costs of an ADEQ requested or required and (in both cases) approved corrective action plan that meets the requirements of A.A.C. R18-12-263.02(B). For costs not included in a Cost Ceiling Item Number, the amount(s) claimed is to be based on "time and materials" detail per A.A.C. R18-12-605(E). Required supporting documentation is the primary service provider invoice and the approved Corrective Action Plan and cover page on file with ADEQ.

per report

208. Periodic site status report (soil only) - per A.A.C. R18-12-263(G)

NOTE: No 2004 Cost Ceiling amount exists for Item Number 208. For cost tracking purposes only, please use this Cost Ceiling Item Number to identify, on the Claimed Summary Worksheet, costs of a complete ADEQ requested periodic site status report on active and passive remediation of soil that meets the requirements of A.A.C. R18-12-263(G). If A.A.C. R18-12-260 through R18-12-264.01 require this report to be a component of another report, preparation costs for the site status report cannot be claimed in addition to the preparation costs of the other report. For costs not included in a Cost Ceiling Item Number, the amount(s) claimed is to be based on "time and materials" detail per A.A.C. R18-12-605(E). Required supporting documentation is the primary service provider invoice and the indicated reporting Form and cover page with attachments on file with ADEQ.

209. Periodic site status report (soil and groundwater) - per A.A.C. R18-12-263(G) per report

NOTE: 2004 Cost Ceiling amount exists for Item Number 209. For cost tracking purposes only, please use this Cost Ceiling Item Number to identify, on the Claimed Summary Worksheet, costs of a complete ADEQ requested periodic site status report on active and passive remediation of soil and groundwater that meets the requirements of A.A.C. R18-12-263(G). If A.A.C. R18-12-260 through R18-12-264.01 require this report to be a component of another report, preparation costs for the site status report cannot be claimed in addition to the preparation costs of the other report. For costs not included in a Cost Ceiling Item Number, the amount(s) claimed is to be based on "time and materials" detail per A.A.C. R18-12-605(E). Required supporting documentation is the primary service provider invoice and the indicated reporting Form and cover page with attachments on file with ADEQ

210. Corrective action completion report - per A.A.C. R18-12-263.03(D) per report

NOTE: No 2004 Cost Ceiling amount exists for Item Number 210. For cost tracking purposes only, please use this Cost Ceiling Item Number to identify, on the Claimed Summary Worksheet, costs of a complete ADEQ approved corrective action completion report that meets the requirements of A.A.C. R18-12-263(G). For costs not included in a Cost Ceiling Item Number, the amount(s) claimed is to be based on "time and materials" detail per A.A.C. R18-12-605(E). Required supporting documentation is the primary service provider invoice and the indicated reporting Form and cover page with attachments on file with ADEQ.